



Quick start guide SPA

Outdoor Noise Monitoring Station, Class 1 for dBA/dBC measurements, 1/3 octave spectrum and audio streaming

You will find more information about your noise monitoring station in the portal.
Please use the login details that you received per e-mail.

In case of any questions:

- Send an e-mail to support@munisense.com, or
- Create a support ticket in the portal (admin/manager), or
- Call us at +31 (0)71-711 4624 (within office hours)



More information? Log in on your online portal. Additional questions? support@munisense.com

v 0.2



Quick start guide SPA

Contents of this box:

1 SPA

2 Weather protector

3 Windscreen

4 Antennas



5 Power adapter

Pole clamp set:

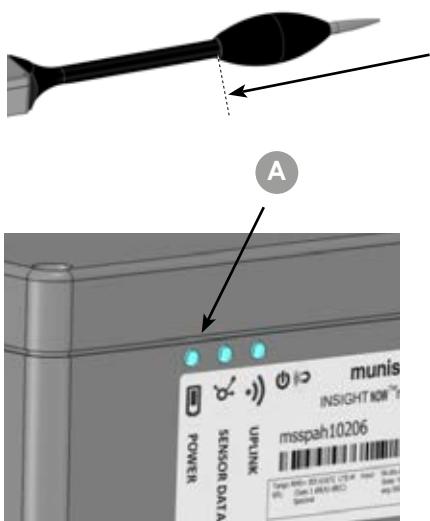
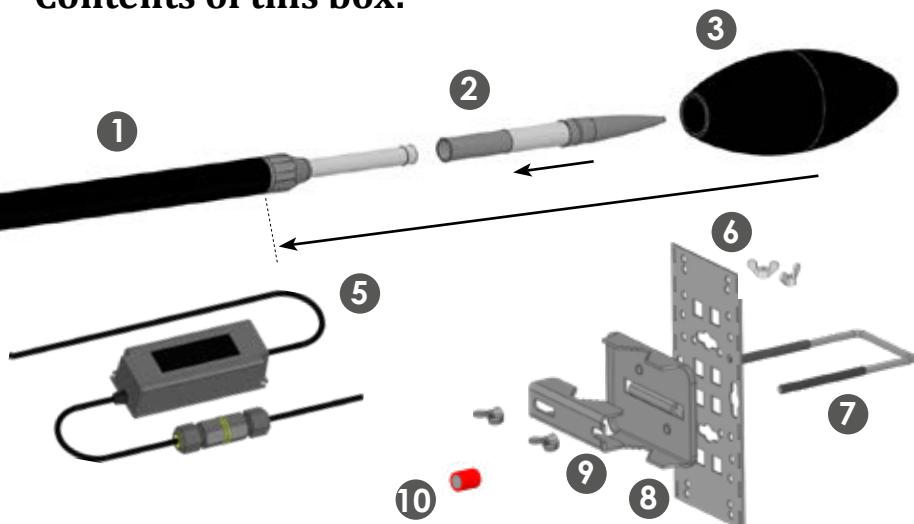
6 Mounting plate & 2 small wing nuts

7 U-bracket & 2 big wing nuts

8 Clamp plate wide

9 Clamp plate small

10 Magnet

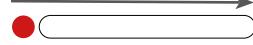
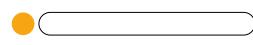


First use instructions

Carefully slide the weather protector over the microphone at the top of the shaft and screw it onto the meter. Slide the foam windscreens over the weather protector until the grey top is completely covered.

Please charge before use as the internal battery will not be fully charged upon receipt. Charging with the power adapter from empty to full takes max. 5 hours.

Upon receipt the meter will be in standby mode, the power LED (A) blinks every eight seconds to indicate the status of the meter:

- | | | |
|---|-------------------------|--|
|  8 seconds → | battery < 25% | charge meter before use in the field. |
|  8 seconds → | battery 25 - 75% | meter can be operational for at least 1 day. |
|  8 seconds → | battery > 75% | meter can be operational for multiple days. |

Standby modus

The meter can be activated using the magnet switch or by connecting power. The standby mode is convenient to save battery power (for instance during transport).

Apply the magnet on the housing at the marking to activate the switch.
Note: remove the magnet as soon as the power LED flashes quickly (after approx. 5 seconds).

The continuously fast blinking power LED indicates the following:

1. Apply magnet to switch **into standby mode**

 **magnet switch recognised, remove magnet.**

 **the meter is switching to standby (takes about 10 sec)**

2. Apply magnet to activate meter **from standby mode**

 **magnet switch recognised, remove magnet.**

 **meter starts booting (takes about 10 sec)**





LEDs

LED PATTERNS EXPLAINED

blinking continuously

one second
lights up once shortly per sec.

lights up longer per sec.

lights up quite long per sec.

continuously lit

blinks once per 8 seconds

Remark:

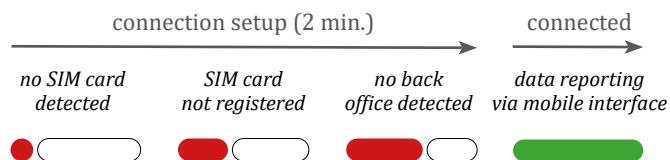
After activation of the meter the LEDs indicate their status. The light intensity of the LEDs dimms after approx. 5 minutes to save power.

The three LEDs specify the status of the meter for power, sensor data and uplink. The LEDs can light up in green, red or orange (orange is when the red and green LED both light up at the same time).

Note: When the meter functions correctly either or both the sensor LED and the uplink LED light up green.

UPLINK LED

The uplink LED indicates status of the uplink, the connection of the meter. The LED will light up green when successfully connected.



SENSOR DATA LED

Indicates the status of the ZigBee connection to a Munisense gateway in the vicinity.



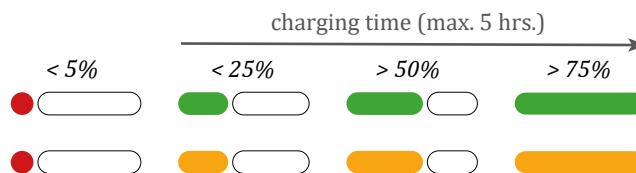
POWER LED

The power LED is the battery power indicator:

Green: Sufficient charging power available as solar power, external battery or mains are connected

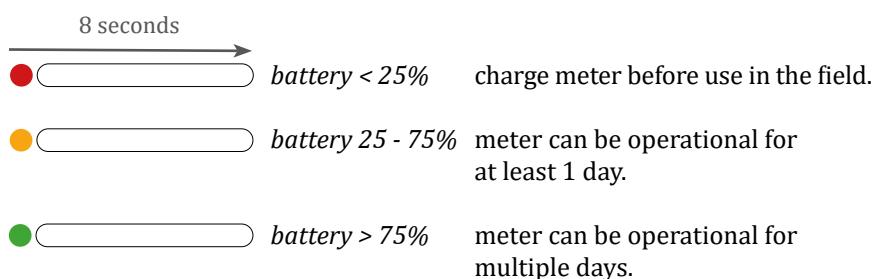
Orange: Insufficient charging power; no solar power, external battery or mains connected or the power from the solar panel or external battery/mains is too low

Note: if all LEDs do not light up for more than one minute the battery is empty and no power is supplied



IN STANDBY MODE

When the meter is in standby mode, the power LED blinks every eight seconds to indicate the status.





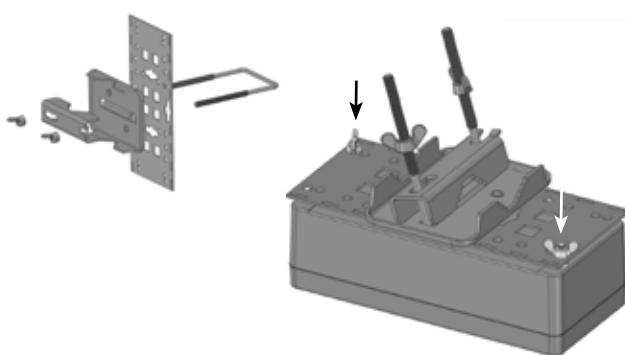
Connecting the antennas



(x) = LTE-M antenna connector
(y) = Local RF antenna connector

When the SPA is stored in the carrying case, the antennas are not connected. Place the rubber rings around the connectors of the SPA. Screw the antenna onto the meter

Attaching pole clamp set



Insert the U-bracket through the large holes in the center of the mounting plate.

Note: The antennas must point downwards after installation. Please choose the appropriate holes to insert the U-bracket.

Secure the plate with the two small wing nuts to the bottom of the housing.

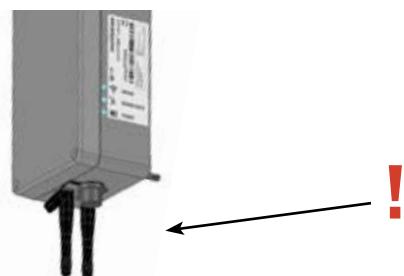
Attach the wide and narrow clamp plate onto the U-bracket and secure it with the two wing nuts. The SPA is ready for installation.

Charging



To charge the SPA connect a power adapter, battery pack or solar panel with the power connector (z).

Installation



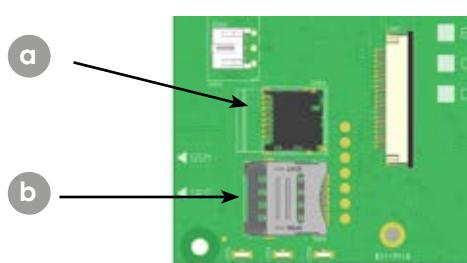
Secure the SPA with the pole clamp and tighten the wing nuts securely. Connect the meter to a 24V power source to power continuously.

IMPORTANT:

The antennas must always be directed downwards!

Change the U-bracket orientation of the pole clamp set if necessary.

SD and SIM card



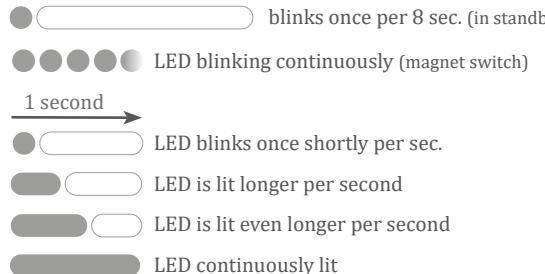
(a) = SD card slot
(b) = SIM card slot

The meter includes a SD card and a SIM card. Exchanging either one of these should be done in consultation with our support department only. You can contact them via support@munisense.com or call +31 (0)71-711 4624.

More information? Log in on your online portal. Additional questions? support@munisense.com

SHORT GUIDE

LED PATTERNS EXPLAINED



Remark: When active the meter's LEDs indicate their status continuously. However, the light intensity of the LEDs dims after approx. 5 minutes to save power.

STAND BY MODE

Apply the magnet on the housing at the marking to activate the switch. **Note:** remove the magnet as soon as the power LED flashes quickly (after approx. 5 seconds).

Apply magnet to switch **into standby**

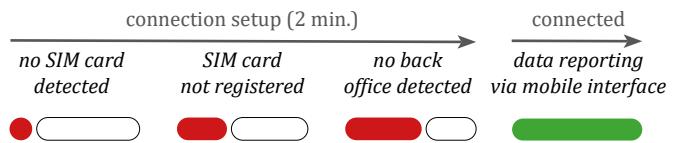
██████████ magnet switch recognised, remove magnet
██████████ the meter switches to standby (± 10 sec).

Apply magnet to activate **from standby**

██████████ magnet switch recognised, remove magnet
██████████ starts booting (± 10 sec).

UPLINK LED

Indicates status of the uplink, the connection of the meter with the portal/back office. The LED will light up green when successfully connected.



SENSOR DATA LED

Indicates the status of the ZigBee connection to a Munisense gateway in the vicinity.



POWER LED

Green LED: sufficient charging power available (solar or mains connected)

Yellow LED: insufficient charging power (no mains or mains/solar power too low)

Note: if all LEDs do not light up for more than one minute the battery is empty and no power is supplied

